suz!			50X				
Standing .							
CENTRAL IN	TELLIGENCE AGENCY		•				
INFORMATI	ION REPORT	This Document contains information affecting the National Defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this form is prohibited.					
	CONFIDENTIA	r	1				
COUNTRY	USSR (Kuybyshev Oblast)	REPORT	50>				
SUBJECT	Engine Production Problems and Aments at Zavod 2, Kuybyshev		29 March, 1954 3 50X1-HUM				
DATE OF INFO.		NO. OF PAGES	3 50X1-HUM				
PLACE ACQUIRED							
TACE ACCORD		•					
	(FOR KEY SEE		50X1-HU				
:	., '	<u>.</u> '	. 50)				
:	Comments		50X1-HU				
1. In 2. In	paragraphs 5 and 6, for Besymya paragraph 6, for Federal accept	nka read Bezymyanka. ance check read State acc	eptance check.				
	•						
· ·							
r resear-							
******							

CONFIDENTIAL

STATE	#x	ARMY	fΧ	NAVY	#x	AIR	fх	FBI		AEC			T
									<b></b>	·	·	 	
(Note:	Washington	Distribution	1 Indic	ated By "X"	'; Field	Distribution	By "	'#".)				 	

50X1.

Buck Oak

50X1 CONFIDENTIAL 50X1-HUM the Soviets were making constant attempts to lower the gross weight of the power consisted of re-50X1-HUM plant. These attempts, ducing the thickness of the sheetmetal used in the turbine housing, and by changing design specification for certain components of the power plant. 50X1-HUM When construction specifications were received in March, 1952 for the Project M type engine, German technicians 50X1-HUM engaged in the design of gears for the power plant discuss the fact that the projected gearing would not be able to withstand desired performance requirements. The critical aspect of the revolved 50X1-HUM entire Project M, around the reduction gearing which coupled the two 022 power plants and transmitted the power of both power plants to a single drive shaft. \_\_\_\_\_not possess detailed information on what the 50X1-HUM difference of opinion between the Soviets and the German techthe Germans recommended that the renicians was but 50X1-HUM ductions gearing be redesigned and the Soviets did not accept this recommendation. / the reduction gears which failed consistently when the engine was 50X1-HUM test run. Even during test runs the gears performed far below the expected performance specification of the power plant. indicated that the Sotechnicians 50X1-HUM viets were trying to overcome reduction gear failures by hydro polishing of gears and by making various changes on the tooth ratio design of the gears. 50X1-HUM In the summer of  $1952\,\mathrm{J}$ production of the M project power plant had 50X1-HUM been transferred to Besymyanka. However design changes in the turbine and compressor blades in order to make changes in tool specifications. \_\_\_\_\_not possess detailed 50X1-HUM knowledge of the performance characteristics of the M project Lt operated at 7600 rpm, and power plant, but 50X1-HUM weighed 3.8 tons. at Zavod 2, a Federal acceptance check on the M project type engine was not performed.

the completed engines of this type were sent from 50X1-HUM Besympanka to Zavod 2 for test operation. type Q12 was ready for testing in May of 1953 at which time Project K was also being prepared for test runs. 50X1-HUM 50X1-HUM

CONFIDENTIAL

COUNTRY: USSR (Kuybyshev Oblast)  SUBJECT: Engine Production Problems and Accomplish- Mo. Of PAGES 2  Ments at Zavod 2, Kuybyshev  NO. OF ENCIS. (INTED BELOW)  SUPPLEMENT TO REPORT NO.  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUN  SOX1-HUN  S	A	<del></del>	CONFIDEN,	TIAL		
COUNTRY: USSR (Enybyshev Oblast)  DATE DISTR. /9 FEB. 5:  SUBJECT: Engine Production Problems and Accomplish- ments-at Zavod 2, Kuybyshev  NO. OF PAGES 2  NO. OF ENCLS. (IGHED BLOW)  SUPPLEMENT TO REPORT NO.  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUN  consisted only of tool and die design for blades used in the turbine and in the compressore of the various power plants pro- duced there. Bowever on occasions  small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borner out further by the  until 1952.  2. Although absolutely no information on the actual fuel con- sumption of the power plant, the Soviets believed fuel consumption to be	•				REPORT	50X1
PLACE PRICE PRICE PRICE PRICE RECOURSED  ACCOURSED  DATE  DATE OF INI  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUN  50X					5	0X1-HUM
PEACE ACQUIRED DATE ACQUIRED  DATE OF INI  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUM  consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. Rowever on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  with the results of the tast performed on the type 022 turbo-prop power plant. Their interest is borne out further by the until 1952.  2. Although absolutely no information on the actual fuel consumption to be 50X1-HUM  sumption of the power plant,  the Soviets believed fuel consumption to be	COUNTRY :	USSR (Kuyt	yshev Oblast)	•	DATE DISTR. 19 Pe	E B. 5 4
THIS IS UNEVALUATED INFORMATION  50X1-HUM  consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. Sowever on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these. Indicated that the Boylets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 the sumption of the power plant.  1.	SUBJECT :	Engine Pro	duction Problems s	and Accomplish-	NO. OF PAGES 2	
ACQUIRED B  DATE OF INI  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUM  consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. Rowever on occasions an opportunity to gain a shall amount of insight into some of the related problems and feel that it would be of value to sumerate some of these plants with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947  until 1952.  2. Although absolutely no information on the actual fuel consumption to be 100X1-HUM  the Soviets believed fuel consumption to be 50X1-HUM  the Soviets believed fuel consumption to be 50X1-HUM		Marino-Ca in	2104 27 2243 27 2221		NO OF ENGIR	
THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  THIS IS UNEVALUATED INFORMATION  50X1-HUN  Sometime of the serior period  the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small smount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne; out further by the until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						50X1-HUM
THIS IS UNEVALUATED INFORMATION  1.						
THIS IS UNEVALUATED INFORMATION  1.	DATE OF 181					
1.   work at Zavod 2, Kuybyshev, during the entire period   consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions   an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.	DATE OF INI	······································	<u> </u>			
1. work at Zavod 2, Kuybyshev, during the entire period consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.    Indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne-out further by the various design changes for the blades from 1947 antil 1952.    2.   Although   absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be			THIS IS UNEVALUATE	D INFORMATION	· :	· · · · · · · · · · · · · · · · · · ·
work at Zavod 2, Kuybyshev, during the entire period consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  Indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be					, a	<u>' ,:</u>
work at Zavod 2, Kuybyshev, during the entire period consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  Indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption of the power plant, the Soviets believed fuel consumption to be	7. 7.			the state of the s		<del></del> ├──:50∨4 ⊔⊔M
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						30X1-HUW
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.    indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						,
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						, ,
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be 50X1-HUN 50X						, ·
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be 50X1-HUN 50X						
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be						
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be			•			
consisted only of tool and die design for blades used in the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.    indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption to be the Soviets believed fuel consumption to be				, , , , , , , , , , , , , , , , , , , ,		
the turbine and in the compressors of the various power plants produced there. However on occasions an opportunity to gain a small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.    indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947    until 1952.   Although   absolutely no information on the actual fuel consumption of the power plant,   the Soviets believed fuel consumption to be	.4.					50V4 LILINA
small amount of insight into some of the related problems and feel that it would be of value to enumerate some of these.  indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the  various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption of the power plant,  the Soviets believed fuel consumption to be						
indicated that the Soviets were pleased with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the  various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption of the power plant,  the Soviets believed fuel consumption to be	small a	mount of ine	sight into some of	the related pro	blems and feel	3021-11010
with the results of the tests performed on the type 022 turbo-prop power plant. Their interest is borne out further by the various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption of the power plant, the Soviets believed fuel consumption to be	that it	would be of	value to enumera	te some of these that the Sovieta	were pleased	7.5
various design changes for the blades from 1947 until 1952.  2. Although absolutely no information on the actual fuel consumption of the power plant, the Soviets believed fuel consumption to be			the tests perform	med on the type	022 turbo-prop	50X1-HUM
2. Although absolutely no information on the actual fuel consumption of the power plant, the Soviets believed fuel consumption to be 50X1-HUN	power p	Lant. Their				<u>.</u>
2. Although absolutely no information on the actual fuel con- sumption of the power plant, the Soviets believed fuel consumption to be		952.				50X1-HUM
sumption of the power plant, the Soviets believed fuel consumption to be 50X1-HUN	2. Althoug			ation on the act	ual fuel oon-	50X1-HUM
	sumption	n of the por		haliewad fual as	ngumntion to be	50X1-HUM
	less th	an that of			mamp trou to 14	

C O N F I D E N T I A L